

## CLAIMS

1. A method for the anaerobic biological degradation of soil-contaminating aromatic and/or aliphatic hydrocarbons present at a contaminated location, wherein a combination of one or more humic acids, if desired as salt, and at least one electron acceptor is added to anaerobic  
5 bacterial populations.
2. A method according to claim 1, wherein said electron acceptor is selected from nitrogenous compounds, in particular nitrate, nitrite and/or  $N_2O$ ; sulfate; chlorate; chlorinated hydrocarbons; and combinations thereof.
3. A method according to claim 2, wherein said electron acceptor is  
10 nitrate.
4. A method according to claim 2, wherein said electron acceptor is perchloroethylene, trichloroethylene, 1,2-dichloroethane, chlorophenol, chlorobenzoic acid and/or chlorobenzene.
5. A method according to any one of the preceding claims, wherein  
15 said location is a contaminated soil and wherein said combination of humic acids and electron acceptor is introduced into the soil by means of injection.
6. A method according to any one of the preceding claims, wherein said aromatic hydrocarbons comprise BTEX (benzene, toluene, ethylbenzene and/or xylene), polycyclic aromatic hydrocarbons (PAHs), aliphatic  
20 hydrocarbons (alkanes, alkenes, oil), or mixtures thereof, which hydrocarbons may or may not be halogenated.
7. A method according to claim 6, wherein said aromatic hydrocarbons comprise benzene which may or may not be chlorinated, preferably monochlorobenzene.
- 25 8. A method according to any one of the preceding claims, wherein said humic acids or salts thereof are used in purified form and/or in the form of compost, humus-rich percolate and/or vegetable material.

9. A mixture of humic acid and nitrate comprising an aqueous solution of 1- 10 wt.% of humic acid and 2 - 20 wt.% of nitrate (expressed as sodium nitrate).
10. Use of a mixture according to claim 9, for the anaerobic biological  
5 degradation of aromatic and aliphatic hydrocarbons.